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General Information

Namespace Conventions

The namespaces assigned to the PIMS package are DG, DPT, SD, SC, and VA.

Background Job Options

<u>OPTION NAME</u>	<u>SUGGESTED RUN FREQUENCY</u>	<u>DEVICE REQUIRED</u>	<u>REMARKS</u>
DG G&L RECALCULATION AUTO	Nightly	NO	Recommended to run @ 9PM
DGJ IRT UPDATE (BACKGROUND)	Nightly after midnight	NO	Schedule in TaskMan
DG PRE-REGISTER NIGHT JOB	Nightly	NO	Run during off hours. Set to null device for MSM sites.
DG PTF BACKGROUND JOB	Nightly	NO	Run during off hours
DG RUG BACKGROUND JOB	Daily	YES	
DG RUG SEMI ANNUAL - TASKED	*	YES	*Queued in advance to run on 10/1 and 4/1
SCDX AMBCAR NIGHTLY XMIT	Nightly	NO	Collects workload information and sends it to NPCDB in Austin via HL7messages
SCENI IEMM SUMMARY BULLETIN	Nightly	NO	Run after nightly transmission to Austin
SCMC PCMM HL7	Nightly	NO	Collects PCMM data that needs to be transmitted to Austin in HL7 format.
SDAM BACKGROUND JOB	Nightly	NO	
SDOQM PM NIGHTLY JOB	As directed	YES	Suggested run time @ 2AM
VAFC BATCH UPDATE	30 minutes	NO	Transmits changes to key patient demographical data
VAFH PIVOT PURGE	Weekly	NO	Purges entries greater than 1.5 years old from ADT/HL7 PIVOT file (#391.71)

E-Mail Notifications

Below is a list of E-Mail notifications associated with the utilization of options in PIMS V. 5.3 in alphabetical order by option name.

<u>OPTION</u>	<u>SUBJECT</u>	<u>ROUTINE</u>
099 Transmission	PTF 099 099 Transmission for Census Record	DGPTF099 DGPTF099
099 Transmission for Census Record	PTF 099	DGPTF099
ACRP Database Conversion	Scheduling Conversion Global Growth for [date range] Scheduling Conversion Template [#] - Event Completed	SCCVEGD0 SCCVLOG2
Any option where a look-up on a sensitive patient record occurs and the user does not hold the DG SENSITIVITY security key.	Restricted Patient Record Accessed	DGBUL (called by DGSEC)
Any Scheduling option that involves patient appointments.	Means Test Required	DGMTREQB
Admit a Patient	Building Management Future Activity Scheduled (includes scheduled admissions on file and waiting list entries) UR Admission Bulletin New Patient Added to System Non-Veteran Admission Veteran Admission Without Verified Eligibility Inpatient Admission for {name}	DGPMVBM DGPMVBUL DGPMVBUR DGPATN DGPMVBUL DGPMVBUL SCMCPM
Ambulatory Care Nightly Transmission to NPCDB (Background Job Option)	Late ACRP Related Activity	SCDXMSG2
AMIS 401-420 Reports	Pending/Open Dispositions	DGA4003
Appointment Management	Late ACRP Related Activity New Patient-Team Assignment for {pt} New Patient-Position Assignment for {pt} Changed Patient-Team Assignment for {pt} Changed Patient-Position Assignment for {pt} Enrollment Patient-Clinic Enrollment For {pt}	SCDXMSG2 SCMCTMM SCMCTPM SCMCTMM SCMCTPM SCMCTPM

<u>OPTION</u>	<u>SUBJECT</u>	<u>ROUTINE</u>
Register a Patient	Inconsistency Edit	DGRPCB
	New Patient Added to System	DGPATN
	Patient Deleted	DGPATN
	Patient Name Changed	DGPATN
	SSN Change	DGPATN
Reset All IDs For All Patients	Reset All ID Formats For All Patients	VADPT61
Scheduling/PCE Bad Pointer Count	Scheduling/PCE Encounter Error Count	SD53120A
Specific Eligibility ID Reset (All Patients)	Reset Specific Eligibility ID Format	VADPT61
Specific ID Format Reset	Reset ID Format	VADPT61
Switch Bed	Building Management	DGPMVBM
Transfer a Patient	Building Management	DGPMVBM
Transmission via VADATS	Rug-II Transmission, Message # <#>	DGRUGDR
Transmit Census Records	Census Transmission	DGPTFTR
	Census Transmission Statistics Summary	DGPTFTR3
	Census Record Reopened	DGPTFTR3
Transmit/Generate Release Comments	MAS V <#> Installation, <site>	DGVREL2
Validity Check of PTF Record	<Patient Name> PTF Transmission	DGPTFVC

E-Mail Notifications Generated by Background Job Options

<u>BULLETIN</u>	<u>SUBJECT</u>	<u>ROUTINE</u>
DGQE PHOTO CAPTURE	Transmission of data to photo	DGQEHL70
SCDX AMBCARE TO NPCDB SUMMARY	Transmission of data to NPCDB Completed	SCDXMSG
SCDX INCOMPLETE ENCOUNTER MGMT	IEMM Summary Report	SCRPI02
SCMC PCMM HL7	Transmit	MAIN^SCMCHL(1)
SDOQM DATA CAPTURE	Access PM Extract from {site name}	SDOQMP
SDOQM PM EXPIRATION	PM Extract Expiration	SDOQMP0

Integrity Checker

PIMS uses the KIDS integrity checker. Under the installation option of the Kernel Installation Distribution System menu, select Verify Checksums in Transport Global to ensure that the routines are correct.

SACC Exemptions/Non-Standard Code

The following are the steps you may take to obtain the SACC exemptions for the PIMS package.

1. FORUM
2. DBA Menu
3. SACC Exemptions Menu
4. Display Exemptions for a Package Option
5. Select SACC Exemptions package: ADT
SD

Resource Requirements

Algorithms

65.1	ADT TU (#101.2/13,750) (Patients Treated/13,750)
65.2	ADT DISK (#101.2/1000) + (#14.11/10) (Patients Treated/1000) + (Wards/10)
66.1	REG TU MAX(#14.2/125,000,.04) (Applications/125,000) (minimum .04)
66.2	REG DISK MAX(#14.2/200,1) (Applications/200) (minimum 1 MB)

Routines

Routines To Map

It is recommended that the following routines be mapped.

DG10*, DGDEP*, DGINP, DGINPW, DGLOCK*, DGMTA*, DGMTCOR, DGMTCOU*, DGMTDD*, DGMTE*, DGMTP*, DGMTR, DGMTSC*, DGMTU*, DGMTX*, DGPMBS*, DGPMDD, DGPMDD1, DGPMDD2, DGPMDDCN, DGPMGL*, DGPMLOS, DGPMSTAT, DGPMV*, DGPTF, DGPTF1, DGPTF2, DGPTF4*, DGPTFD, DGPTFJ, DGPTFTR, DGPTICD, DGPTR*, DGPTSU*, DGPTTS*, DGREG*, DGRP*, DGSEC, DGUTL, DPTDUP, DPTLK*, SCAP*, SCUTBK*, SCMCT*, SDACS*, SDAM*, SDAMBAE*, SDCO*, SDDIV, SDM*, SDOE*, SDQ*, SDROUT*, SDUL, SDVSIT*, SDXACS*, VADPT*, VAFEDCAP, VAFEDG, VALM, VALM0, VALM00, VALM1, VALM10, VALM11, VALM2, VALM4, VALM40.

Also map the routines generated by the following compiled templates.

DGJX*, DGPMX*, DGPTX*, DGRPTX*, DGRPX*, SDAP*, SDAMXOE*, SDBT*, SDM1T*, SDX*.

Callable Routines

\$\$INSTPCTM^SCAPMC	Institution & team for pt's pc team
\$\$PRCL^SCAPMC	Practitioners for a Clinic
\$\$PRPT^SCAPMC	Practitioners for a Patient
\$\$PRTM^SCAPMC	Practitioners for a Team
\$\$PTTM^SCAPMC	Patients for a Team
\$\$\$SITE^VASITE	Obtain Station Number Information
\$\$TMPT^SCAPMC	Teams for a Patient
DGINPW	Obtain Inpatient Status
DGPMLOS	Obtain Length of Stay by Admission
GETALL^SCAPMCA	Return assignment information
OUTPTAP^SDUTL3	Return associate pc provider information
SDOE	ACRP Interface Toolkit
SDQ	ACRP Interface Toolkit
SDUTL3	Utility to enter and view primary care fields
VACPT	Display CPT Copyright Info
VADATE	Generic Date Routine
VADPT	Obtain Patient Information
VALM	List Manager
VAFMON	Obtain Income or Dependent Information
VATRAN	Establish VADATS Transmission Variables
VATREDIT	Enter/Edit TRANSMISSION ROUTERS File
VAUQWK	Quick Lookup for Patient Data
VAUTOMA	Generic One, Many, All Routine

See the Package-Wide Variables section of this manual for entry points.

Compiled Template Routines

It is recommended you recompile the following templates at 4000 bytes.

Input Templates

<u>FILE #</u>	<u>TEMPLATE NAME</u>	<u>ROUTINES</u>
2	DG CONSISTENCY CHECKER	DGRPXC*
	DG LOAD EDIT SCREEN 7	DGRPXX7*
	DGRP COLLATERAL REGISTER	DGRPXCR*
	DGRPT 10-10T REGISTRATION	DGRPTXE*
	SDM1	SDM1T*
40.8	DGTS	DGXTS
44	SDB	SDBT*
45	DG PTF CREATE PTF ENTRY	DGPTXC*
	DG PTF POST CREATE	DGPTXCA*
	DG 101	DGPTX1*
	DG 401	DGPTX4*
	DG 501	DGPTX5*
	DG 501F	DGPTX5F*
	DG 701	DGPTX7*
45.5	DG PTF ADD MESSAGE	DGPTXMS*
393	DGJ EDIT IRT RECORD	DGJXE*
	DGJ ENTER IRT RECORD	DGJXA*

<u>FILE NUMBER</u>	<u>FILE NAME</u>	<u>GLOBAL</u>
45.91	RUG-II	^DG(45.91,
47**	MAS FORMS AND SCREENS	^DIC(47,
48**	MAS RELEASE NOTES	^DG(48,
48.5**	MAS MODULE	^DG(48.5,
389.9	STATION NUMBER (TIME SENSITIVE)	^VA(389.9,
391**	TYPE OF PATIENT	^DG(391,
391.1	AMIS SEGMENT	^DG(391.1,
392	BENEFICIARY TRAVEL CLAIM	^DGBT(392,
392.1	BENEFICIARY TRAVEL DISTANCE	^DGBT(392.1,
392.2	BENEFICIARY TRAVEL CERTIFICATION	^DGBT(392.2,
392.3**	BENEFICIARY TRAVEL ACCOUNT	^DGBT(392.3,
392.4	BENEFICIARY TRAVEL MODE OF TRANSPORTATION	^DGBT(392.4,
393	INCOMPLETE RECORDS	^VAS(393,
393.1*	MAS SERVICE	^DG(393.1,
393.2*	IRT STATUS	^DG(393.2,
393.3*	IRT TYPE OF DEFICIENCY	^VAS(393.3,
393.41*	TYPE OF CATEGORY	^VAS(393.41,
403.35	SCHEDULING USER PREFERENCE	^SCRS(403.35,
403.43*	SCHEDULING EVENT	^SD(403.43,
403.44*	SCHEDULING REASON	^SD(403.44,
403.46*	STANDARD POSITION	^SD(403.46,
403.47*	TEAM PURPOSE	^SD(403.47,
404.41	OUTPATIENT PROFILE	^SCPT(404.41,
404.42	PATIENT TEAM ASSIGNMENT	^SCPT(404.42,
404.43	PATIENT TEAM POSITION ASSIGNMENT	^SCPT(404.43,
404.44	PCMM PARAMETER	^SCTM(404.44,
404.45	PCMM SERVER PATCH	^SCTM(404.45,
404.46	PCMM CLIENT PATCH	^SCTM(404.46,
404.48	PCMM HL7 EVENT	^SCPT(404.48,
404.49	PCMM HL7 ID	^SCPT(404.49,
404.51	TEAM	^SCTM(404.51,
404.52	POSITION ASSIGNMENT HISTORY	^SCTM(404.52,
404.53	PRECEPTOR ASSIGNMENT HISTORY	^SCTM(404.53,
404.56	TEAM AUTOLINK	^SCTM(404.56,
404.57	TEAM POSITION	^SCTM(404.57,
404.58	TEAM HISTORY	^SCTM(404.58,
404.59	TEAM POSITION HISTORY	^SCTM(404.59,
404.91	SCHEDULING PARAMETER	^SD(404.91,
404.92*	SCHEDULING REPORT DEFINITION	^SD(404.92,
404.93*	SCHEDULING REPORT FIELDS DEFINITION	^SD(404.93,
404.94*	SCHEDULING REPORT GROUP	^SD(404.94,
404.95*	SCHEDULING REPORT QUERY TEMPLATE	^SD(404.95,
404.98	SCHEDULING CONVERSION SPECIFICATION	^SD(404.98,
	TEMPLATE	
405	PATIENT MOVEMENT	^DGPM(
405.1	FACILITY MOVEMENT TYPE	^DG(405.1,
405.2**	MAS MOVEMENT TYPE	^DG(405.2,
405.3**	MAS MOVEMENT TRANSACTION TYPE	^DG(405.3,
405.4	ROOM-BED	^DG(405.4,
405.5**	MAS OUT-OF-SERVICE	^DG(405.5,

Files

<u>FILE NUMBER</u>	<u>FILE NAME</u>	<u>GLOBAL</u>
405.6	ROOM-BED DESCRIPTION	^DG(405.6,
406.41**	LODGING REASON	^DG(406.41,
407.5	LETTER	^VA(407.5,
407.6**	LETTER TYPE	^VA(407.6,
407.7**	TRANSMISSION ROUTERS	^VAT(407.7,
408	DISCRETIONARY WORKLOAD	^VAT(408,
408.11*	RELATIONSHIP	^DG(408.11,
408.12	PATIENT RELATION	^DGPR(408.12,
408.13	INCOME PERSON	^DGPR(408.13,
408.21	INDIVIDUAL ANNUAL INCOME	^DGMT(408.21,
408.22	INCOME RELATION	^DGMT(408.22,
408.31	ANNUAL MEANS TEST	^DGMT(408.31,
408.32**	MEANS TEST STATUS	^DG(408.32,
408.33**	TYPE OF TEST	^DG(408.33,
408.34**	SOURCE OF INCOME TEST	^DG(408.34,
408.41	MEANS TEST CHANGES	^DG(408.41,
408.42**	MEANS TEST CHANGES TYPE	^DG(408.42,
409.1**	APPOINTMENT TYPE	^SD(409.1,
409.2**	CANCELLATION REASONS	^SD(409.2,
409.41**	OUTPATIENT CLASSIFICATION TYPE	^SD(409.41,
409.42	OUTPATIENT CLASSIFICATION	^SDD(409.42,
409.45**	OUTPATIENT CLASSIFICATION STOP CODE EXCEPTION	^SD(409.45,
409.62**	APPOINTMENT GROUP	^SD(409.62,
409.63**	APPOINTMENT STATUS	^SD(409.63,
409.64	QUERY OBJECT	^SD(409.64,
409.65	APPOINTMENT STATUS UPDATE LOG	^SDD(409.65,
409.66**	APPOINTMENT TRANSACTION TYPE	^SD(409.66,
409.67	CLINIC GROUP	^SD(409.67,
409.68	OUTPATIENT ENCOUNTER	^SCE(
409.73	TRANSMITTED OUTPATIENT ENCOUNTER	^SD(409.73,
409.74	DELETED OUTPATIENT ENCOUNTER	^SD(409.74,
409.75	TRANSMITTED OUTPATIENT ENCOUNTER ERROR	^SD(409.75,
409.76**	TRANSMITTED OUTPATIENT ENCOUNTER ERROR CODE	^SD(409.76,
409.77	ACRP TRANSMISSION HISTORY	^SD(409.77,
409.91	ACRP REPORT TEMPLATE	^SDD(409.91,
409.92	ACRP REPORT TEMPLATE PARAMETER	^SD(409.92,

* File comes with data

** File comes with data which will overwrite existing data, if specified

Package-Wide Variables

There are no package-wide variables associated with the PIMS package.

Key Variables

PIMS System Wide Variables

DFN Internal entry of the PATIENT file
SSN Social security number
AGE Age of patient
DOB Date of birth
SEX Sex of patient

VADPT Variables

See Appendix A.

Scheduling Variables

SDUTL3 contains utilities used to display and retrieve data from the CURRENT PC TEAM and CURRENT PC PRACTITIONER fields in the PATIENT file. Documentation can also be found in the routine.

\$\$OUTPTPR^SDUTL3(PARM 1) - displays data from CURRENT PC PRACTITIONER field.

Input	PARM 1	The internal entry of the PATIENT file.
Output		CURRENT PC PRACTITIONER in Internal^External format. If look-up is unsuccessful, 0 will be returned.

\$\$OUTPTTM^SDUTL3(PARM 1) - displays data from CURRENT PC TEAM field.

Input	PARM 1	The internal entry of the PATIENT file.
Output		CURRENT PC TEAM in Internal^External format. If look-up is unsuccessful, 0 will be returned.

\$\$OUTPTAP^SDUTL3(PARM 1, PARM 2)

Input	PARM 1	The internal entry of the PATIENT file.
	PARM 2	The relevant data.
Output		Pointer to File 200^external value of the name.

\$\$GETALL^SCAPMCA(PARM 1, PARM 2, PARM 3)

This tag returns all information on a patient's assignment. Please review the documentation in the SCAPMCA routine.

INPTPR^SDUTL3(PARM 1, PARM 2) - stores data in CURRENT PC PRACTITIONER field.

Input	PARM 1	The internal entry of the PATIENT file.
	PARM 2	Pointer to the NEW PERSON file indicating the practitioner associated with the patient's care.
Output	SDOKS	1 if data is stored successfully; 0 otherwise

INPTTM^SDUTL3(PARM 1, PARM 2) - stores data in CURRENT PC TEAM field.

Input	PARM 1	The internal entry of the PATIENT file.
	PARM 2	Pointer to the TEAM file indicating the team associated with the patient's care.
Output	SDOKS	1 if data is stored successfully; 0 otherwise

VAUTOMA

VAUTOMA is a routine which will do a one/many/all prompt - returning the chosen values in a subscripted variable specified by the calling programmer.

Input variables:

VAUTSTR	string which describes what is to be entered.
VAUTNI	defines if array is sorted alphabetically or numerically.
VAUTVB	name of the subscripted variable to be returned.
VAUTNALL	define this variable if you do not want the user to be given the ALL option.

Other variables as required by a call to ^DIC (see VA FileMan Programmers Manual).

Output variables:

As defined in VAUTVB

<u>FILE NUMBER</u>	<u>FILE NAME</u>	<u>DD ACCESS</u>	<u>RD ACCESS</u>	<u>WR ACCESS</u>	<u>DEL ACCESS</u>	<u>LAYGO ACCESS</u>
43	MAS PARAMETERS	@	d	D	@	@
43.1	MAS EVENT RATES	@	d	D	D	D
43.11	MAS AWARD	@	d	D	D	D
43.4	VA ADMITTING REGULATION	@	d	@	@	@
43.5	G&L CORRECTIONS	@	d	D	D	D
43.61	G&L TYPE OF CHANGE	@	d	@	@	@
43.7	ADT TEMPLATE	@	d	@	@	@
44	HOSPITAL LOCATION	@	d	D	@	D
45	PTF	@	d	D	@	@
45.1	SOURCE OF ADMISSION	@	d	@	@	@
45.2	PTF TRANSFERRING FACILITY	@	d	D	@	D
45.3	SURGICAL SPECIALTY	@	d	@	@	@
45.4	PTF DIALYSIS TYPE	@	d	@	@	@
45.5	PTF MESSAGE	@	d	@	@	@
45.6	PLACE OF DISPOSITION	@	d	@	@	@
45.61	PTF ABUSED SUBSTANCE	@	d	@	@	@
45.62	PTF ARCHIVE/PURGE HISTORY	@	d	@	@	@
45.64	PTF AUSTIN ERROR CODES	@	d	@	@	@
45.68	FACILITY SUFFIX	@	d	@	@	@
45.7	FACILITY TREATING SPECIALTY	@	d	D	@	D
45.81	STATION TYPE	@	d	@	@	@
45.82	CATEGORY OF BENEFICIARY	@	d	@	@	@
45.83	PTF RELEASE	@	d	@	@	@
45.84	PTF CLOSE OUT	@	d	@	@	@
45.85	CENSUS WORKFILE	@	d	D	@	@
45.86	PTF CENSUS DATE	@	d	@	@	@
45.87	PTF TRANSACTION REQUEST LOG	@	d	@	@	@
45.88	PTF EXPANDED CODE CATEGORY	@	d	@	@	@
45.89	PTF EXPANDED CODE	@	d	@	@	@
45.9	PAF	@	d	D	D	D
45.91	RUG-II	@	d	@	@	@
47	MAS FORMS AND SCREENS	@	d	@	@	@
48	MAS RELEASE NOTES	@	d	D	@	@
48.5	MAS MODULE	@	d	@	@	@
389.9	STATION NUMBER (TIME SENSITIVE)	@	d	@	@	@
391	TYPE OF PATIENT	@	d	@	@	@
391.1	AMIS SEGMENT	@	d	@	@	@
392	BENE TRAVEL CLAIM	@	d	@	@	@
392.1	BENE TRAVEL DISTANCE	@	d	D	D	D
392.2	BENE TRAVEL CERTIFICATION	@	d	D	D	D
392.3	BENE TRAVEL ACCOUNT	@	d	@	@	@
392.4	BENE TRAV MODE OF TRANS	@	d	D	@	D
393	INCOMPLETE RECORDS	@	d	D	D	D
393.1	MAS SERVICE	@	d	@	@	@
393.2	IRT STATUS	@	d	@	@	@
393.3	IRT TYPE OF DEFICIENCY	@	d	@	@	@
393.41	TYPE OF CATEGORY	@	d	@	@	@
403.35	SCHEDULING USER PREFERENCE	@	d	@	@	@
403.43	SCHEDULING EVENT	@	d	@	@	@
403.44	SCHEDULING REASON	@	d	@	@	@
403.46	STANDARD POSITION	@	d	@	@	@
403.47	TEAM PURPOSE	@	d	@	@	@
404.41	OUTPATIENT PROFILE	@	d	@	@	@
404.42	PATIENT TEAM ASSIGNMENT	@	d	@	@	@

Security

<u>FILE NUMBER</u>	<u>FILE NAME</u>	<u>DD ACCESS</u>	<u>RD ACCESS</u>	<u>WR ACCESS</u>	<u>DEL ACCESS</u>	<u>LAYGO ACCESS</u>
404.43	PATIENT TEAM POSITION ASSIGNMENT	@	d	@	@	@
404.44	PCMM PARAMETER	@	@	@	@	@
404.45	PCMM SERVER PATCH	@	@	@	@	@
404.46	PCMM CLIENT PATCH	@	@	@	@	@
404.48	PCMM HL7 EVENT	@	@	@	@	@
404.49	PCMM HL7 ID	@	@	@	@	@
404.51	TEAM	@	d	@	@	@
404.52	POSITION ASSIGNMENT HISTORY	@	d	@	@	@
404.53	PRECEPTOR ASSIGNMENT HISTORY	@	d	@	@	@
404.56	TEAM AUTOLINK	@	d	@	@	@
404.57	TEAM POSITION	@	d	@	@	@
404.58	TEAM HISTORY	@	d	@	@	@
404.59	TEAM POSITION HISTORY	@	d	@	@	@
404.91	SCHEDULING PARAMETER	@	d	@	@	@
404.92	SCHEDULING REPORT DEFINITION	@	d	@	@	@
404.93	SCHEDULING REPORT FIELDS DEFINITION	@	d	@	@	@
404.94	SCHEDULING REPORT GROUP	@	d	@	@	@
404.95	SCHEDULING REPORT QUERY TEMPLATE	@	d	@	@	@
404.98	SCHEDULING CONVERSATION SPECIFICATION TEMPLATE	@	d	@	@	@
405	PATIENT MOVEMENT	@	d	@	@	@
405.1	FACILITY MOVEMENT TYPE	@	d	D	@	D
405.2	MAS MOVEMENT TYPE	@	d	@	@	@
405.3	MAS MOVEMENT TRANSACTION TYPE	@	d	@	@	@
405.4	ROOM-BED	@	d	D	@	D
405.5	MAS OUT-OF-SERVICE	@	d	@	@	@
405.6	ROOM-BED DESCRIPTION	@	d	D	@	D
406.41	LODGING REASON	@	d	D	@	D
407.5	LETTER	@	d	D	D	D
407.6	LETTER TYPE	@	d	@	@	@
407.7	TRANSMISSION ROUTERS	@	d	@	@	@
408	DISCRETIONARY WORKLOAD	@	d	@	@	@
408.11	RELATIONSHIP	@	d	@	@	@
408.12	PATIENT RELATION	@	d	@	@	@
408.13	INCOME PERSON	@	d	@	@	@
408.21	INDIVIDUAL ANNUAL INCOME	@	d	@	@	@
408.22	INCOME RELATION	@	d	@	@	@
408.31	ANNUAL MEANS TEST	@	d	@	@	@
408.32	MEANS TEST STATUS	@	d	@	@	@
408.33	TYPE OF TEST	@	d	@	@	@
408.34	SOURCE OF INCOME TEST	@	d	@	@	@
408.41	MEANS TEST CHANGES	@	d	@	@	@
408.42	MEANS TEST CHANGES TYPE	@	d	@	@	@
409.1	APPOINTMENT TYPE	@	d	@	@	@
409.2	CANCELLATION REASONS	@	d	@	@	@
409.41	OUTPATIENT CLASSIFICATION TYPE	@	d	@	@	@
409.42	OUTPATIENT CLASSIFICATION	@	d	D	D	D
409.45	OUTPATIENT CLASSIFICATION STOP CODE EXCEPTION	@	d	@	@	@
409.62	APPOINTMENT GROUP	@	d	@	@	@

<u>FILE NUMBER</u>	<u>FILE NAME</u>	<u>DD ACCESS</u>	<u>RD ACCESS</u>	<u>WR ACCESS</u>	<u>DEL ACCESS</u>	<u>LAYGO ACCESS</u>
409.63	APPOINTMENT STATUS	@	d	@	@	@
409.64	QUERY OBJECT	@	d	@	@	@
409.65	APPOINTMENT STATUS UPDATE LOG	@	d	@	@	@
409.66	APPOINTMENT TRANSACTION TYPE	@	d	@	@	@
409.67	CLINIC GROUP	@		D	@	D
409.68	OUTPATIENT ENCOUNTER	@	d	@	@	@
409.73	TRANSMITTED OUTPATIENT ENCOUNTER	@	d	@	@	@
409.74	DELETED OUTPATIENT ENCOUNTER	@	d	@	@	@
409.75	TRANSMITTED OUTPATIENT ENCOUNTER ERROR	@	d	@	@	@
409.76	TRANSMITTED OUTPATIENT ENCOUNTER ERROR CODE	@	d	@	@	@
409.77	ACRP TRANSMISSION HISTORY	@	d	@	@	@
409.91	ACRP REPORT TEMPLATE	@		@	@	@
409.92	ACRP REPORT TEMPLATE PARAMETER	@		@	@	@

Appendix C - HL7 Interface Specification for the Transmission of PCMM Primary Care Data

1 INTRODUCTION

This interface specification specifies the information needed for PCMM Primary Care data reporting. This data exchange will be triggered by specific events in the PCMM package. The basic communication protocol will be addressed, as well as the information that will be made available and how it will be obtained.

1.1 General

This application will use the abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events that occur in health care environments.

For example, when a patient is assigned to a primary care team in PCMM, the event will trigger a PCMM primary care update message. This message is an unsolicited transaction to all external systems interfacing with **VISTA**.

The formats of these messages conform to the Version 2.3 HL7 Interface Standards where applicable. HL7 custom message formats ("Z" segments) are used only when necessary.

1.2 Assumptions

Assumptions have been made at the beginning of this project in order to help define the scope and meet the initial needs in interfacing with the Austin Automation Center (AAC).

1.2.1 Message Content

The data sent in the HL7 messages will be limited to the information that can be processed by the AAC, with the exception of the PID segment, which will be populated using the nationally supported **VISTA** call. The data being sent will also be limited to what is available in **VISTA**.

In order to capture the most information, specific PCMM events will generate messages to the AAC systems. This is not intended to cover all possible PCMM events; only those which may result in the capture of primary care data needed to update the National Patient Care Database (NPCD). The mode for capturing data for PCMM events was chosen to capture as much of the data as possible. (See Data Capture and Transmission (1.2.2) for further information on the mode for capturing the PCMM events.)

Per the HL7 standards, Primary Care data fields that are transmitted as null ("") will delete data from the NPCD. A field that is transmitted as blank does not delete data; it simply means take no action on the field. In the ZPC segment, if field **Provider Assignment ID** has a value and all remaining fields are nulls, Austin should do the following.

If this record exists, **delete** it from the database.
If this record does not exist, **ignore** this segment.

1.2.2 Data Capture and Transmission

When PCMM options or calls are used to update specific primary care data in **VISTA**, these events and changes will be captured. Any changes made to the **VISTA** database in non-standard ways, such as a direct global set by an application or by MUMPS code, will not be captured.

1.2.3 Background Messages

A nightly background job will be sending HL7 messages for the appropriate PCMM primary care event for the day.

1.2.4 VA MailMan Lower Level Protocol

HL7 V. 1.6 of the VA MailMan lower level protocol (LLP) will be used. This version of the VA MailMan LLP differs from HL7 V. 1.5 in that a blank line is placed between each segment in the message [denoting a carriage return].

2 HL7 CONTROL SEGMENTS

This section defines the HL7 control segments supported by **VISTA**. The messages are presented separately and defined by category. Segments are also described. The messages are presented in the following categories:

Message Control

Unsolicited Transactions from **VISTA** (Section 3)

2.1 Message Definitions

From the **VISTA** perspective, all incoming or outgoing messages are handled or generated based on an event.

In this section, and the following sections, these elements will be defined for each message:

- The trigger events
- The message event code
- A list of segments used in the message
- A list of fields for each segment in the message

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [] indicates the segment is optional, the { } indicates the segment is repeatable. For each message category there will be a list of HL7 standard segments or "Z" segments used for the message.

2.2 Segment Table Definitions

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL #), the element name, and the **VISTA** description. Each segment is described in the following sections.

2.3 Message Control Segments

This section describes the message control segments that are contained in message types described in this document. These are generic descriptions. Any time any of the segments described in this section are included in a message in this document, the **VISTA** descriptions and mappings will be as specified here, unless otherwise specified in that section.

2.3.1 MSH - Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = (bar) Escape = \ (back slash) Sub-component = & (ampersand)
3	15	ST				Sending Application	PCMM
4	20	ST				Sending Facility	Station's facility number
5	30	ST				Receiving Application	NPCD-PCMM
6	30	ST				Receiving Facility	Facility=200
7	26	TS				Date/Time Of Message	Date and time message was created
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	<u>2 Components</u> 1. Refer to Table 0076 2. Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package
11	1	ID	R		0103	Processing ID	P (production)
12	8	ID	R		0104	Version ID	2.3 (Version 2.3)
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	Not used

2.3.2 EVN - Event Type Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	3	ID	R		0003	Event Type Code	Refer to Table 0003
2	26	TS	R			Date/Time of Event	Date/Time Event Occurred
3	26	TS				Date/Time Planned Event	Not used
4	3	ID			0062	Event Reason Code	Not used
5	60	CN			0188	Operator ID	Not used

2.3.3 PID - Patient Identification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	4	SI				Set ID - Patient ID	Always 1
2	20	CK				Patient ID (External ID)	Integration Control Number (ICN)
3	20	CM	R	Y		Patient ID (Internal ID)	Pointer to entry in PATIENT file
4	12	ST				Alternate Patient ID	Primary Short ID
5	48	PN	R			Patient Name	Name
6	30	ST				Mother's Maiden Name	Mother's maiden name
7	26	TS				Date of Birth	Date of birth
8	1	ID			0001	Sex	<i>Refer to Table 0001</i>
9	48	PN		Y		Patient Alias	Alias
10	1	ID			0005	Race	Race
11	106	AD		Y		Patient Address	Address
12	4	ID				County Code	VA County Code
13	40	TN		Y		Phone Number - Home	Phone number (residence)
14	40	TN		Y		Phone Number - Business	Phone number (work)
15	25	ST				Language - Patient	Not used
16	1	ID			0002	Marital Status	<i>Refer to Table 0002</i>
17	3	ID			0006	Religion	Religion
18	20	CK				Patient Account Number	Not used
19	16	ST				SSN Number - Patient	Social security number and pseudo indicator
20	25	CM				Driver's Lic Num - Patient	Not used
21	20	CK				Mother's Identifier	Not used
22	1	ID			0189	Ethnic Group	Not used
23	25	ST				Birth Place	Not used
24	2	ID				Multiple Birth Indicator	Not used
25	2	NM				Birth Order	Not used
26	3	ID		Y	0171	Citizenship	Not used
27	60	CE			0172	Veterans Military Status	Not used

2.3.4 ZPC – VA Specific Primary Care Information Segment

						VISTA DESCRIPTION
1	20	ST	R			Provider Assignment ID Facility – number Example: 500-234 Where: 500 = Facility number 234 = Pointer to full ID in PCMM HL7 ID file (404.49).
2	90	XCN	R			Provider ID <u>14 Components</u> 1. <u>2 Sub-Components</u> 1.1. Pointer to entry in NEW PERSON file (#200) 1.2. Facility Number 2. Not used 3. Not used 4. Not used 5. Not used 6. Not used 7. Not used 8. This will always be VA200 (NEW PERSON file) 9. Not used 10. Not used 11. Not used 12. Not used 13. Not used 14. Not used
3	26	TS	R			Date Provider Assigned File POSITION ASSIGNMENT HISTORY (404.52), field .02 –or– PRECEPTOR ASSIGNMENT HISTORY (404.53), field .02 .
4	26	TS	O			Date Provider Unassigned Date is derived from STATUS field (.04) in both POSITION ASSIGNMENT HISTORY (404.52), and PRECEPTOR ASSIGNMENT HISTORY (404.53)..
5	3	ID	R			Provider Type Code PCP = Primary Care Provider AP = Associate Provider
6	20	CE	O			Provider Person Class <u>3 Components</u> 1. Provider Type Code 2. Not used 3. This will always be VA8932.1 (PERSON CLASS file)

3 PURPOSE

This section defines the HL7 message transactions that are necessary to support the primary care data in the NPCD for the Austin Automation Center (AAC). These messages will use the generic HL7 format, so that they can be expanded later to support new interfaces at other facilities.

3.1 Trigger Events and Message Definitions

Each triggering event is listed below, along with the applicable form of the message to be exchanged. The notation used to describe the sequence, option, and repetition of segments is described in the HL7 Final Standard Manual, Chapter 2, Section 2.4.8, Chapter Formats for Defining Abstract Messages, and in summary form, in Section 2.1 of this document.

3.1.1 Update Patient Information (A08)

PCMM Primary Care trigger events will create an entry into the PCMM HL7 EVENT file (#404.48) under the following circumstances.

- When a patient is assigned/unassigned to a position
- When an existing patient assignment is edited
- When an existing patient assignment is deleted
- When a provider is assigned/unassigned to a position
- When an existing provider assignment is edited
- When an existing provider assignment is deleted

A recurring job will process the PCMM HL7 EVENT file and trigger an A08 message to be sent for each patient marked for transmission. The receiving system will replace any data that exists with the “new” data that is transmitted with this message based on the **Provider Assignment ID** field.

Business Rules

When an entry is deleted, a ZPC segment will be sent showing the Provider Assignment ID and the remaining fields as null (“”). This will delete the current record.

ADT	ADT Message	Section
MSH	Message Header	2.3.1
EVN	Event Type	2.3.2
PID	Patient Identification	2.3.3
{ZPC}	PCMM Primary Care Data	2.3.4

4 SUPPORTED AND USER-DEFINED HL7 TABLES

4.1 Table 0001 - Sex

VALUE	DESCRIPTION
F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

4.2 Table 0002 - Marital Status

VALUE	DESCRIPTION
A	SEPARATED
D	DIVORCED
M	MARRIED
S	SINGLE
W	WIDOWED

4.3 Table 0003 - Event Type Code

VALUE	DESCRIPTION
A08	UPDATE PATIENT INFORMATION

4.4 Table 0005 - Race

VALUE	DESCRIPTION
1	HISPANIC, WHITE
2	HISPANIC, BLACK
3	AMERICAN INDIAN OR ALASKA NATIVE
4	BLACK, NOT OF HISPANIC ORIGIN
5	ASIAN OR PACIFIC ISLANDER
6	WHITE, NOT OF HISPANIC ORIGIN
7	UNKNOWN

4.5 Table 0006 - Religion

VALUE	DESCRIPTION
0	CATHOLIC
1	JEWISH
2	EASTERN ORTHODOX
3	BAPTIST
4	METHODIST
5	LUTHERAN
6	PRESBYTERIAN
7	UNITED CHURCH OF CHRIST
8	EPISCOPALIAN
9	ADVENTIST
10	ASSEMBLY OF GOD
11	BRETHREN
12	CHRISTIAN SCIENTIST
13	CHURCH OF CHRIST
14	CHURCH OF GOD
15	DISCIPLES OF CHRIST
16	EVANGELICAL COVENANT
17	FRIENDS
18	JEHOVAH'S WITNESS
19	LATTER-DAY SAINTS
20	ISLAM
21	NAZARENE
22	OTHER
23	PENTECOSTAL
24	PROTESTANT, OTHER
25	PROTESTANT, NO DENOMINATION
26	REFORMED
27	SALVATION ARMY
28	UNITARIAN; UNIVERSALIST
29	UNKNOWN/NO PREFERENCE
30	NATIVE AMERICAN
31	BUDDHIST

4.6 Table 0076 - Message Type

VALUE	DESCRIPTION
ADT	ADT MESSAGE

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